

WHAT IS CLAIMED IS:

1. A method of wafer processing comprising the steps of:

placing a first surface of a water vapor trap in communication with an interior of the wafer processing chamber;

cooling the first surface to a water vapor condensation temperature;

processing a wafer in a wafer processing chamber using a processing gas, the wafer processing producing water vapor as a byproduct;

accumulating the byproduct water vapor on the first cooled surface;

moving the first cooled surface from communication with the interior of the wafer processing chamber to a position exterior to the interior of the wafer processing chamber;

moving a second surface of the water vapor trap in communication with the interior of the wafer processing chamber; and

cooling the second surface to the water vapor condensation temperature.

2. The method of claim 1, wherein the water vapor condensation temperature comprises a temperature no lower than approximately 77K.

3. The method of claim 1, further comprising the step of:

accumulating the byproduct water vapor on the second surface of the water vapor trap.

4. The method of claim 1, wherein the steps of moving the first and second surfaces includes rotating the water vapor trap.
5. The method of claim 1, further comprising the step of regenerating the first surface of the water vapor trap after moving the first surface from communication with the interior of the wafer processing chamber to a position exterior to the interior of the wafer processing chamber while the second surface of the water vapor trap is accumulating water vapor.
6. The method of claim 5, wherein the step of regenerating the first surface of the water vapor trap includes heating the first surface.